

THE NASA INFRARED TELESCOPE FACILITY COMET HALLEY
MONITORING PROGRAM II. POST-PERHELION RESULTS

A. T. Tokunaga

Institute for Astronomy, University of Hawaii

W. F. Golisch, D. M. Griep and C. D. Kaminski
Infrared Telescope Facility

M. S. Hanner

Jet Propulsion Laboratory

The post-perihelion results of a 1-20 μ m infrared monitoring program of Comet Halley are presented. These results complement previous observations of the pre-perihelion passage of Halley (Tokunaga *et al.* 1986). The observations cover the time period of March 1986 to the present time. During the time the comet was observable, we obtained two or more observations per month. The most interesting results were (1) a detectable change in the J-H and H-K colors of Halley, and (2) a search for a nuclear rotation at J during 20 February to 10 March was unsuccessful.

The perihelion J-H and H-K colors were constant at 0.48 ± 0.01 and 0.17 ± 0.01 , respectively. A preliminary reduction of the data shows that the post-perihelion colors were:

	J-H	H-K
20 Apr. - 12 June 1986	0.43 ± 0.03	0.15 ± 0.01
6 July - 21 Dec. 1986	0.40 ± 0.02	0.06 ± 0.02
26 Feb. - Mar. 1987	0.36 ± 0.05	0.07 ± 0.04

Thus the colors were at first similar to pre-perihelion and then changed from July onward to be bluer and more similar to the solar colors. This suggests that a change may have occurred in the composition of the dust coma of Halley in July 1986.

Reference

Tokunaga *et al.* 1986, *Astron. J.*, **92**, 1183.